

# NAVRIP AIRSpeed

October 2005 Naval Aviation Readiness Integrated Improvement Program

Volume 3 Issue 4

# Oceana TRIAD Works Together to Increase Flight-line Readiness

Wing MO, ASD & AIMD are a Readiness Enabling Team

By Christine Lawson NAVRIIP/Enterprise AIRSpeed

On the first day of the Boots on the Ground (BOG) event, the Naval Aviation Integrated Improvement Program (NAVRIIP) team was given a tag team brief by the Oceana TRIAD, whose members include CDR Bob Ramsey Wing Maintenance Officer, CDR Jim Weiser Wing Aviation Supply Division (ASD) Officer, and CDR Ellen Moore Aviation Intermediate Maintenance Division Officer In Charge.



AM2 Richard McDaniel from the AIMD Oceana Composite Repair Shop explains his job at Work Center 51F to RDML Shannon, RADM H. Denby Starling II Commander Naval Air Force Atlantic Fleet and VADM Wally Massenburg Commander Naval Air System Command during a Boots on the Ground visit June 29, 2005.

The team briefed the successes they were reaping using the NAVRIIP and Enterprise AIRSpeed tools. However, the most signifisuccess wasn't mentioned in the brief, but was illustrated in how the TRIAD addressed readiness as a team and less as individual stovepipes. "...The bottom line is flightline support," said CDR Jim Weiser, the ASD Officer, as he discussed how his team works to support flight-line readiness.

The BOG was attended by VADM Wally Massenburg,

Commander Naval Air Systems Command, RADM Denby Starling, Commander Naval Air Forces Atlantic, senior leadership from Headquarters Marine Corps, NAVAIR program offices, fleet support teams, Navy Inventory Control Point and the Defense Logistics Agency.

The BOG group walked through 14 work centers where the Petty Officers briefed the group on how they were applying the Enterprise AIR*Speed* tools of Theory of Constraints, Lean and Six Sigma to their work center and the successes they have produced.

(Continued on page 3)

#### **Table of Contents**

Oceana TRIAD 1
PETs Stand Up 1
MALS AIR Speed 1
AIRSpeed How and Why 3
NAVRIIP University 4
Type-Model-Series Schedule 4

# PETs Stand Up!

To date four PMA's have stood up Product Enterprise Teams (PETs) to address their most significant mission readiness and life cycle cost drivers: PMA 265 (F/A 18), PMA 260 (Aviation Support Equipment), PMA 299 (H-60) and PMA 231 (E2/C2).

(Continued on page 2)

# Marine Aviation Logistics School Embraces AIRSpeed

School graduates its first Enterprise AIR Speed class



By Capt. Bert Cruz, USMC

The 14 graduates of class 2005-10 became the first Aviation Logistics officers to have Enterprise AIRSpeed as part of their curriculum. Enterprise AIRSpeed is helping the Marine Aviation Logistics Squadrons (MALS) exploit modern logistics concepts in order to anticipate and respond to Sea Power 21, Marine Corps Strategy 21, Expeditionary Maneuver Warfare requirements as well as current operations such as Operation Iraqi Freedom, Operation Enduring Freedom and the Global War on Terror.

The Marines were taught the industry proven tools Theory of Constraints, Lean and Six Sigma and how they are applied at the MALS. These Enterprise AIRSpeed tools teach the Marines how to identify and address interdependencies, manage and reduce variability, identify and manage constraints and eliminate waste to properly manage aircraft ready for tasking requirements.

"Evidently, the new curriculum is working because several of the officers (at MALS 39) have been impressed with my knowledge of the Supply Accounting Division and AIRSpeed," remarked 2<sup>nd</sup> Lt Van Es.

For the past 18 months, Lt Col. Don Walter,

(Continued on page 3)

#### PMA 265 F/A 18

- 1) GCU Generator Converter Unit
- 2) F404 Afterburner Flameholder
- 3) F404 Material Aft Cooling Plate Evaluation
- 4) F404 Oil Pressure Transmitter Bracket
- 5) Roll Pitch Yaw Computer / Flight Control Computer
- 6) Radar Support Equipment Transmitter Self Test
- Radar Support Equipment Operational Test Program Set Load Box and FET Tune CCA
- 8) Radar Transmitter
- 9) Cockpit Video Recording System (CVRS/CRS)
- 10) Enhanced Interference Blanker Unit

#### PMA 299 H-60 Helicopter

- 1) Drag Beam
- 2) Flight Control Self Retaining Bolts
- 3) Damper Rod End Bearings
- 4) Kamatics Torque Shaft Bearing
- 5) Fuel Management Control Panel
- 6) Armament System Controller
- 7) Digital Video Recorder
- 8) Main Gearbox Housing
- 9) Counter Measures Receiver
- 10) Av-Dec Antenna gaskets
- 11) T700 engine

#### PMA 260 Aviation Support Equipment

1) NC-10 - Mobile Electronic Power Plant

#### PMA 231 E2/C2

- 1) E-2/C-2 Antenna
- 2) E-2 ALR-73 Passive Detection System
- 3) APS-145 Transmitter
- 4) 12-Ton Vapor Cycle Cooling System
- 5) C-2 Seats/Cargo
- 6) E-2 Dome Air Leak Test Set
- 7) E-2/C-2 Flight Control Set
- 8) Anti-Collision Light Assembly
- 9) C-2 Pressurization Seal
- 10) Structural Data Recording System
- 11) T-56-425 Inventory Right Sizing

#### What is a PET?

A Product Enterprise Team (PET) is a cross-functional team of subject matter experts led by the Program office that is focused on one product/commodity line that has critical impact to cost-wise readiness (CWR). It provides CWR oversight and direction over the processes, people, money and stuff associated with that product/commodity applying the CWRIIP process in support of the TMS/Product Team.

#### **Cost-Wise Readiness Integrated Improvement Process (CWRIIP)**

The CWRIIP process is designed to simplify the focus of improvement efforts through a lens of reliability, total cost, cycle time, and inventory. It provides tools to the Program manager to prioritize efforts and support decision-making. CWRIIP supports a stronger alignment of both people and products.

## **Operating Cost**

Operating Cost/Month/ Flight Hour: Total \$ spent – Includes AVDLR/AFM/ Manpower (O&I level) – this is all included in LMDSS

#### **SCIR**

Component SCIR/Month or Flight Hour- Trend – This chart would include NMCM/ NMCS and PMCM/PMCS

#### Reliability (TOV)

MFHBR (Mean Flight Hours Between Removal)

#### Cycle Time

Dynamic Cycle Time through O-I-D- RFI

#### Productivity

Outs per labor hour charged

#### First Pass Yield

"Y" Codes and "A799"

# PET

Perfomance Cockpit Chart

(Notional

## **Inventory**

Inventory: Installs + Spares + Non RFI – In the NAVICP Database – Include "due ins" – Include those items managed by DLA

# RFI as % Inventory

Installs + Spares / Total

#### **Embracing AIRSpeed** (Continued from page 1)

Commander, Marine Detachment Athens, Georgia has taken his officer students to tour MALS 31 and MALS 14 so they can see first-hand their future working environment. Conversations with the Marines at the MALS convinced Lt Col. Walter that new officers needed to be trained in Enterprise AIR Speed to keep up with what the fleet needed. So Capt. Bert Cruz, in conjunction with the Enterprise AIR Speed Project Office, developed the new curriculum to be in sync with what is currently being implemented in the fleet.

"I am amazed at how well this class assimilated and applied the AIR Speed tools. They even identified problems while we were on the commercial factory tour - to the astonishment of seasoned industrial managers at the factory," said Lt Col. Walter.

But Enterprise AIR Speed goes deeper than logistics. With a single fleet driven metric of aircraft Ready for Tasking (RFT) at reduced cost it is attacking cultural and systemic barriers to readiness.

"Years ago, in aviation logistics, we were measured by metrics that

focused on range & depth of shelf stock, issues, and inventory validity. Although we were concerned with aircraft readiness, it was not our primary objective. Enterprise AIRSpeed is changing everyone's focus to a common "goal" of Aircraft Ready for Tasking." said Capt. Bert Cruz.

Through Enterprise AIR Speed and NAVRIIP this behavior and the metrics that drove it are now recognized as barriers to RFT. These old metrics are being challenged and changed to focus everyone on the goal of RFT no matter where they fall in the logistic and supply chain infrastructure.

AIRSpeed's focus of attacking barriers to readiness is the foundation of its success. The results it's generating by increasing readiness via reductions in repair turn around time and unnecessary inventory, as well as cost savings to the AIMDs and the MALS will guarantee its longevity. And with the schoolhouses adopting AIRSpeed as part of their curriculum the Navy/Marine Corps team will ensure they have the people and tools in place to generate the readiness they need when they need it most.

## Oceana TRIAD (Continued from page 1)

- The F404 engine shop has reduced turn around time from 78 days to 27 and eliminated bare fire walls.
- ♦ The airframes division has decreased Beyond Capable Maintenance rate of Flight Control Surfaces from 96% to 59% and reduced hydraulic actuator cycle time by 47%.
- The gun shop reduced turn around time from 9 days to 3 days.

"Kitting" was a theme throughout the tour and illustrated the close relationship between supply and maintenance. Kitting is being used to reduce repair time in the 500 Division for airframes, 700 Division for the Hornet gun system and 600 Division for the AFG-73 antenna. Kitting is when supply personnel assemble the parts and supplies for known maintenance and place them in one container or bag so maintenance personnel can focus on repairing the item for use by the flight line instead of searching for parts.

The improvements are ongoing and continuous for the Oceana TRIAD at every level. As the F/A-18 passed its six million-flight hour this year, improved maintenance on this aircraft becomes more necessary. AIRSpeed and NAVRIIP help the TRIAD manage these realities and sustain the readiness Naval Aviation needs in a cost wise manner today and for the future.



Denisse Berry, an employee of L3 Vertex, talks with VADM Wally Massenburg about her work in Work Center 414 on the F404 engine for the F/A 18 Hornet.

# Enterprise AIRSpeed The How and Why

By LCDR Mark Nieto, USN Aviation Maintenance Officer and Team Lead, Enterprise AIRSpeed

Naval Aviation is very successful at generating Readiness. However, we have always done so at a great cost. Maintaining Naval Aviation today while building the Naval Air Force of tomorrow requires that we now embark on a "cost-wise readiness" journey to ensure that we don't buy more current readiness than we need so as to enable the purchase of new systems and aircraft needed for future readiness requirements.

Enterprise AIRSpeed is operationalizing Cost Wise Readiness throughout Naval Aviation under the Naval Aviation Readiness Integrated Improvement Programs (NAVRIIP) architecture. Enterprise AIRSpeed uses Theory of Constraints (TOC) to "design" the future state of Naval Aviation and Lean and Six Sigma are utilized with TOC to resolve the constraints the TOC "design" identified.

Unlike the current practice of operating within our disciplines, commonly referred to as stovepipes, AIRSpeed is an enterprise approach of looking at the business of Naval Aviation. Enterprise AIRSpeed is defined as the integration of organizational, intermediate and depot levels of maintenance with the retail and wholesale activities of supply as they support ashore and afloat activities.

Enterprise AIR Speed is doing something that no other DoD activity has attempted; integrating TOC, Lean and Six Sigma methodologies and applying them across the entire enterprise in order to effectively and efficiently prepare ready for tasking (RFT) aircraft in support of current readiness requirements. These methodologies are reducing the resources of people, parts and money needed to generate current readiness. These methodologies, besides generating readiness at reduced cost are generating readiness faster by decreasing turn around times by maintenance and supply for flight-line support.

Most commercial companies and DoD activities choose either TOC, Lean or Six Sigma. Some choose Lean and Six Sigma but only Naval Aviation has decided to utilize all three tools simultaneously. Naval Aviation is truly paving the path for the Department of Defense.

### What are the AIR Speed methodologies?

Theory of Constraints (TOC) is based on the belief that any organization has at least one constraint and that any improvements on non-constraints may not yield as significant return on investment (ROI) as working on the constraint itself once identified. It is also based on market demand-pull logistics, which creates architecture where physical inventory (buffer) levels and related maintenance processes at intermediate and depot activities are based on actual real-time demand (pull) in the time to reliably replenish (TRR).

Lean focuses on the removal of wastedefined as anything not necessary (no value added) to produce the product or service with a reduction in cycle time for the product or service provided to the intended customer.

Six Sigma is based on the assumption that the outcome of the entire process will be improved by reducing the variation of multiple



AIRSpeed team photo from Whidbey Island implementation. Team membership consists of personnel from AIMD Whidbey Island, ASD Whidbey, Enterprise AIRSpeed core team, NATEC, EA-6B FST, CNAF, P-3 FST, AIMD Jacksonville and AGI.

• Determine I-Level work center TRRs and supply processing TRRs to establish total local TRRs based on time for component to go from the aircraft, to the I-Level, through the repair process and onto supply shelf ready for issue (RFI). Think of total TRR as attaching and activating a stopwatch on a non-RFI component from the time it is removed from an aircraft and stop the watch after it has gone through the repair process and is actually on the shelf RFI and available to the end-user

 Determine TRRs for consumable and repairable components from external activities. This encompasses the time from when a part was determined to be a requirement, ordered and finally

received and available for use

• Evaluate fleet (end user) demand patterns to determine proper physical inventory sizes based demand patterns during established TRRs: evaluate further the demand patterns and TRRs to make cost-benefit analysis of inventory size versus reduction of TRRs through focused Lean and Six

Sigma initiatives to reduce associated inventory size

- Establish rules and provide tools for managing components through the time domain to ensure established TRRs are met and physical inventory levels are maintained to meet readiness requirements
- Determine structure, rules and processes for to-be future environment and document them
- Train site personnel in the skill sets necessary to continue the design in the remainder of the I-level and actual deployment of the design
- Develop a detailed project plan for the deployment of design

One of the primary concepts in an AIRSpeed design is focusing on the proper levels of shop replaceable assemblies (SRA) and consumable parts, in order to facilitate the reduction or elimination of acquisitions for new more expensive weapon replaceable assemblies (WRA). Proper WRA inventory levels require that the supporting SRA and consumable inventories must be in place.

What determines the inventory levels? TRRs and customer demand patterns determine inventory levels. Lean and Six Sigma tools are applied to protect constraints and ensure TRRs within the work center and local supply activities. They also enable a balance of TRR and inventory levels. Analysis is conducted during the AIR*Speed* design and deployment to identify those areas where application of Lean and Six Sigma can reduce TRR to meet current allowance levels, or where TRR reduction can substantially reduce inventory levels - even below current allowances.

## **AIRSpeed Provides**

elements, inputs and sub-processes.

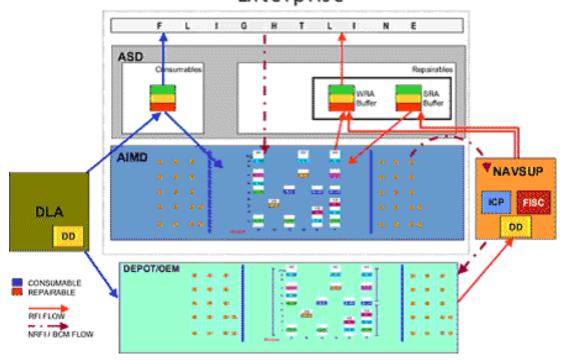
- Increased, improved and effective support of the Fleet Response Plan (FRP)
- Improved logistics/maintenance response
- Improvement to throughput (readiness) while identifying reductions to operating expenses and investments such as inventory, manpower, support equipment and facilities
- A proven set of industry tools into Naval Aviation Enterprise
- Leveraging of existing initiatives
- Local production/replenishment decisions made with global im pact known
- A culture of continuous process improvement

### How AIR Speed is Implemented

The basics of an I-Level AIR Speed TOC Design Phase:

- Determine a starting point by selecting top local and system wide readiness/cost degrader components to determine which work centers to begin design
- Determine the "As-Is" environment with physical configura tion diagrams, local process flow diagrams and documentation of local processes
- Measure capacity of test benches/SE/manpower in selected work centers

# A Working Model of AIR Speed in the Naval Aviation Enterprise



In some cases however, reduction of TRR is not cost effective, or no level of TRR reduction will lead to an inventory level to meet current allowances. In these cases inventory relocation in the enterprise or possible investment will be necessary. There are also efforts just beginning to explore AIRSpeed integration with other inventory management initiatives from DLA and NAVICP such as Multi-Indenture SHORECAL/AVCAL (which also focuses on investment in consumables and SRA inventory) as well as National Inventory Management Strategy-NIMS (an effort to manage consumable inventory physically and financially from an enterprise perspective rather than locally).

The implementation of an AIR Speed design is a substantial effort. Current implementation design phases involve seven on-site weeks over an 11-week period. Some Enterprise AIR Speed teams involve anywhere from 20-30 personnel representing AIR Speed facilitators, contractor support, Fleet Support Teams, NATEC, and CNAF. Local site design teams are approximately 30 personnel for major I-Level sites and they are comprised of personnel from the local I-Level, Aviation Supply Department, and Type Wings.

#### Fleet Response

The response from Sailors and Marines has been overwhelming. The amount of creative ideas and enthusiasm has been incredible. Enterprise AIR Speed teams discover Sailors and Marines with great ideas and these personnel see AIR Speed as an avenue to change the barriers that they have had to cope with in performing their jobs. Enterprise AIR Speed teams and the site design teams they work with continually "trip" over policies, behaviors and measurements that will require elimination or change to enable Enterprise AIR Speed to succeed. These recommended changes are captured and processed through type wing commanders for local elimination/change or escalation to CNAF, Type Model Series Teams and to the NAVRIIP CFT if necessary.

AIRSpeed is a cultural change at all levels of the enterprise. The

buy-in and educational process of an implementation is extremely challenging. We are asking people to change the way they have done and thought about their business for decades. It must be clear that the Marines and Sailors aren't doing anything wrong. They are just doing what they've been taught by their predecessors. Yet, no longer can Naval Aviation afford to operate in the same manner. Therefore, better practices must be incorporated in order to achieve costwise readiness, be flexible enough to meet current and future requirements and generate readiness at reduced costs so Naval Aviation can afford future aircraft/system acquisition, and recapitalize of our aging fleet.

To ensure the sustainment of Enterprise AIR *Speed*, the implementation teams will continue to need experienced officers, senior enlisted and civil service personnel representing aviation maintenance and supply from the Navy

and Marine Corps until the methods of AIR *Speed* are a core competency of the entire Naval Aviation Enterprise.

AIRSpeed has completed designs at NAS Oceana, NAS Lemoore, MALS-31, NADEP North Island, NADEP JAX, NAS Whidbey Island, NAS North Island, MALS-11, MALS-14, NAS JAX and NS Mayport. The remainder of the shore Navy and Marine Corps activities will be designed over the next year with afloat activities to follow.

### Challenges

#### Policy/Measurements

- New policies and corresponding measurements (such as TRR performance) should be put in place to support Enterprise AIRSpeed designs.
- Legacy policies and measurements should be eliminated if they don't support the new architecture of Enterprise AIR *Speed*.

#### Manpower

- Enterprise AIR *Speed* program office needs support to fill billets in newly established sea duty UIC with experienced aviation maintenance and supply senior enlisted and officers.
- Enterprise AIR *Speed* implementation teams continue to need support from external groups such as FST's, NATEC and Supply activities for upcoming implementations.

#### Communication

• The NAE needs to continue its communication plan to spread awareness of Enterprise AIRSpeed to all levels of the enterprise

#### **AIRSpeed Teams**

Enterprise AIR Speed is sponsored by CNAF and is governed by an executive steering committee consisting of representatives from CNAF, Naval Inventory Control Point, Philadelphia (NAVICP), Defense Logistics Agency (DLA), NAVAIR, OPNAV, HQMC, and the Center for Naval Technical Training (CNATT).

## **NAE Leadership:**

Vice Adm. James Zortman

Commander, Naval Air Forces

NAE Chief Executive Officer

#### Vice Adm. Wally Massenburg

Commander, Naval Air Systems Command

NAE Chief Operating Officer

#### Rear Adm. Denby Starling

Commander, Naval Air Atlantic

**CFT NAVRIIP** 

#### Rear Adm. Kevin Quinn

Chief of Naval Air Training (CNATRA) Commander, Navy Region South CFT Training

#### Rear Adm. Thomas Kilcline

Chief Financial Officer, NAE (N78)

#### Rear Adm. James Robb

Director, Fleet Readiness Division (N43)

**CFT Cost Management** 

#### Rear Adm. William Shannon (s)

CFT Human Capital Strategy, Transition Team Lead

#### **CAPT Ken Ireland**

NAE Executive Assistant

#### CAPT J. R. Brown

NAVRIIP Chief of Staff

#### **CAPT Ken Campitelli**

Enterprise AIR Speed Project Officer

NAE Web site: http://www.nae.cnaf.navy.mil

NAVRIIP Web site: http://www.airpac.navy.mil/navriip

#### **Enterprise AIRSpeed Web site:**

http://www.airspeed.cnaf.navy.mil

#### **MyNAVAIR Web site:**

mynavair.navair.navy.mil (Portal for NAVRIIP documents)

For more information on NAVRIIP and AIR Speed, call 301-757-4875 or link to www.airspeed.cnaf.navy.mil.

The Enterprise AIR Speed implementation teams consist of military, contractor and civilian personnel who have been assigned from Commander Naval Air Forces (CNAF), Headquarters Marine Corps (HQMC), Naval Air Systems Command (NAVAIR) and Naval Air Technical Data and Engineering Command (NATEC). The teams travel around the world to facilitate AIR Speed designs at Navy and Marine Corps intermediate and depot level maintenance activities as well as Supply Departments/Divisions.

The primary Enterprise AIRSpeed program office is comprised of 42 dedicated active duty maintenance and supply officers, enlisted, civil servants, and contractors located in offices at NAS North Island and NAS Patuxent River. The program also has 41 qualified NAVAIR Fleet Support Team (FST) and NATEC personnel from around the fleet.

LCDR Mark Nieto graduated from the Navy Supply Corps School in 1994 and served as the Cargo Officer on the USS Sacramento (AOE 1). He was redesignated as an Aviation Maintenance Officer in 1996 and has served in various positions in Helicopter Anti-Submarine Squadron 7 (HS 7) and Aviation Intermediate Maintenance Detachment Oceana as well as graduating from the Naval Postgraduate School in 2000.

# NAVRIIP University Now Online

NAVRIIP 101: Introduction to NAVRIIP (for managers and for users) is now available on Navy E-Learning. Visit the "What's New" section on the NKO website to enroll www.nko.navy.mil.

The NAVRIIP 101 basic overview course focuses on the processes, tools and applications available in the NAVRIIP and AIR*Speed* toolkits. The training will introduce NAVRIIP and AIR*Speed* history, the charter and organization, an overview of the processes, tools, teams and success stories.

Employees will learn about process value management tools, which address dynamic cycle time, and best business practices, including a focus on Theory of Constraints, Lean and Six Sigma. The training will also explain the aviation financial analysis tool (AFAST), and cross-functional team and type/model/series team participation.

# **Type-Model-Series Schedule**

OCTOBER	03 NAE BOD 18 (NCFT) PAR 25 & 26 BOG 25 NAE BOD	HM (MH-53) 1230-1500 Eastern HSC (SH-60F/HH-60H/MH-60S) & HSM (SH-60B) 1300 - 1530 Eastern NAS Atlanta Boots on the Ground VS (S-3) & VP (P-3) Noon - 1430 Eastern	
NOVEMBER	NAE BOD NCFT(PAR) TRW	Rescheduled to Oct 25 Rescheduled to December HM-53 Cancelled	
DECEMBER	01 NCFT (PAR) 07 & 08 BOG 08 NAE BOD 20 NCFT (PAR)	VFA (F/A-18A-C & FRS D) & VFA (F/A-18E/F) 1300-1530 Eastern NAS Mayport Boots on the Ground HSC (SH-60F/HH-60H/MH-60S) & HSM (SH-60B) Noon - 1430 Eastern E-6 (TACAMO) 1300-1530 Eastern	BOG – Boots on the Ground BOD – Board of Directors

**TRW - TYCOM Readiness Workshop -** The TRW consists of two elements: Readiness and Aircraft/Systems. 1) At the Readiness portion the Lead Commodore/MAG CO and PMA will review Readiness gaps and provide/develop gap closure planning using top level chart analysis. Forum for readiness barrier escalation to TYCOM. 2) The Aircraft & Systems workshop, hosted by TYCOM N42s, allows O-6 and below staffs to work with the WINGMOs/MALS COs and APMLs on CPC interpretation, degrader rank ordering, and root cause analysis.

NCFT - NAVRIIP Cross Functional Team/PAR - Providers Assessment Report (NCFT PAR) - The PAR brief is held in conjunction the NAVRIIP CFT (NCFT) VTC/F2F every month except October. At the NCFT PAR the PMA and Lead Commodore provide a detailed Aircraft & Systems barrier escalation brief to the NAVRIIP CFT. Each brief will last 30-60 minutes and will be first on agenda at the NCFT PAR. Standard time 1300-1530 Eastern



# F/A-18 ENTERPRISE AIRSPEED SUCCESSES

Right Part... at the Right Place... at the Right Time... Now and in the Future

For the past 18 months, teams have been implementing Enterprise AIRSpeed at the AIMD's, ASD's, MALS and Depots across the country and in Japan. Below is a snapshot of the successes they have achieved for F/A-18 TMS readiness.

#### **ENGINES**

#### AIMD Lemoore

• Reduced turn around time from 83 days to 12

#### AIMD Oceana

- Reduced turn around time from 78 days to 27 while maintaining a 15% increase in module builds
- Eliminated 30 Bare Fire Walls (BFW) and now have 22 spares
- Decreased F-404 Rail usage from 18 to 6 due to decreased Work in Progress (WIP)

#### MALS 11

• Developed "Kitting" for standard parts which reduced ordering time by 94%

#### AVIONICS

#### AIMD Lemoore

• Radar shop reduced turn around time from 14 days to 2

#### IMA Oceana

 Reduced Radar repair hours from 144 per week to 80 while maintaining throughput, including surge capability

#### **AIRFRAMES**

#### IMA Oceana

• Reduced Leading Edge Flap Expeditious repair (EXREPS) rate from 47% to 9%

#### AIMD Oceana

- Decreased Beyond Capable Maintenance (BCM) rate of Flight Control Surfaces from 96% to 59%
- Reduced hydraulic actuator cycle time by 47%

#### **ORDNANCE**

#### AIMD Lemoore

• Eliminated Bomb Release Units (BRU) being turned in before 210-day inspection (Quality built in)

#### IMA Oceana

• Reduced cycle time from 4.7 hours to 1 in missile rail repair process

#### LIFE SUPPORT

#### AIMD Lemoore

- Paraloft first division to add "Defect" elimination to their processes
- Reduced Packet Radio Unit (PRU/URT) repair time fron 90min to 30min

Success data was determined after initial site implementation of Enterprise AIRSpeed. Continuous ongoing improvement is expected at each site.

#### WANT MORE INFORMATION?

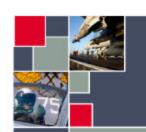
Enterprise AIR*Speed* – www.AIRSPEED.CNAF.Navy.mil

Naval Aviation Enterprise – www.NAE.CNAF.Navy.mil

Naval Aviation Readiness Integrated Improvement Plan — www.AIRPAC.Navy.mil/NAVRIIP

Marine Corps Logistical Support Plan – <a href="http://hqinet001.hqmc.usmc.mil/AVN/ASL/B">http://hqinet001.hqmc.usmc.mil/AVN/ASL/B</a> <a href="mailto:ranch\_Head/In\_Work/ASLMalsp\_II.htm">ranch\_Head/In\_Work/ASLMalsp\_II.htm</a>





# ENTERPRISE AIRSPEED

Right Part... at the Right Place... at the Right Time... Now and in the Future

Warfighting is naval aviation's number one priority. Successful warfighters understand how to lead and manage their commands to extract the maximum warfighting capability from the sailors and equipment that our nation has provided and entrusted to our leadership. While we measure our profit in terms of readiness and mission success, we have a duty to achieve these goals in the most cost-efficient manner." -AIRBOSS

#### What does Enterprise AIRSpeed mean to squadrons?

Reliable weapons systems and aircraft at the right place, at the right time, now and in the future.

#### What is Enterprise AIRSpeed

Enterprise AIRSpeed is a systems approach that aligns and optimizes maintenance and supply activities to the enduser demand (operators). It creates an environment of continuous process improvement and alignment to a common goal, aircraft ready for tasking at reduced cost. The scope of the initiative encompasses all facets of maintenance and supply, and includes the transportation system as well. It utilizes an integrated set of business tools (Theory of Constraints, Lean and Six Sigma) to transform the repair and replenishment process from a "push" to a "pull" system and identifies and manages constraints, variability and interdependencies within the system. Enterprise AIRSpeed allows managers to look at the system holistically and enables them to make local decisions with the global impact known.

Enterprise AIRSpeed provides flexibility and responsiveness in support of force projection and provides for the expeditious repair and replenishment of critical items and assets needed to achieve and support of Aircraft Ready for Tasking at reduced cost across the Enterprise. Enterprise AIRSpeed is designed to integrate the decision-making processes of asset positioning and visibility with those of planning and scheduling across the entire logistics and operations chain. Implementing Enterprise AIRSpeed is critical to ensuring increased deployed and shore-based readiness, including the expeditious reconstitution of forces at a reduced cost. Enterprise AIRSpeed is designed to become a self-sustaining program through the utilization of the "train the trainer" approach.

#### When will I get Enterprise AIRSpeed?

In CY04, Enterprise AIRSpeed was implemented at Aircraft Intermediate Maintenance Department (AIMD) /Aviation Supply Department (ASD) Oceana, AIMD/ASD Lemoore, Marine Aviation Logistics Squadron (MALS) 31 and Naval Aviation Depot (NADEP) North Island. Implementations began at another 12 activities during the same timeframe. The Enterprise AIRSpeed team is scheduled to implement all CONUS and OCONUS AIMDs/ASDs, MALS and Depots including the supply chain interfaces by December 2006. The team has begun prototype work aboard aircraft carriers, L-class ships and organizational activities.

#### Why do we have to do Enterprise AIR Speed now?

Enterprise AIRSpeed was developed to respond to shortfalls in material readiness, the readiness requirements of the Fleet Response Plan and to an existing trend in Naval Aviation of trading out-year new aircraft purchases in order to cover current readiness bills. This trend resulted in the FY04 budget procurement of 100 aircraft of the 201 planned for recapitalization. Naval Aviation needed to have a change of mindset in the way it generated readiness and how it paid for that readiness. No longer was "readiness at any cost" an acceptable way of conducting business. Naval Aviation needed to transition into "cost-wise readiness" in order to be able to fully recapitalize to its requirements. To this end, Enterprise AIRSpeed began.

